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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/648,592

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Mark Grayson

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EXAMINER

SMITH, MARCUS

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/648,592	<b>Applicant(s)</b> GRAYSON ET AL.	
	<b>Examiner</b> MARCUS R. SMITH	<b>Art Unit</b> 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8,10-13,15 and 17-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,10-13,15 and 17-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/10/09 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 4/10/09 have been fully considered but they are not persuasive. The examiner disagrees with the applicant that Amin et al. fails to teach disclose wherein the request is not an express request to change quality of service supported by the communication device. First, the examiner interprets the claim limitation as the mobile/user terminal not having the authority to demand that the communication session change the quality of service level. During patent examination, the claims are given the broadest reasonable interpretation consistent with the specification. Also Amin et al. teaches where user request for a change of resources can be explicit or implicit (see column 8, lines 60-67). Since the implicit request modify the QoS in session as well as explicit message (column 10, lines 5-15), the examiner views the QoS modification request as an implicit request message. Therefore the QoS modification request message from the mobile host to the RAN in figure 16 does not

Art Unit: 2419

have to be an express request to change quality of service. Thus the QoS modification request message can be just SIP message with the desired QoS (column 9, lines 1-10).

***Response to Amendment***

3. The amendment filed on 4/10/09 has been considered but is ineffective to overcome the previous prior art references.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 3-6, 8, 10-13, 15, 17-18, 20 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Amin et al. (US 6,910,074, the examiner previously cited on 11/13/07).

With regard to claims 1, 8, and 15, Amin teaches (see figure 16): In an application server (Serving LSF, which has a policy manager and AAA components ( 208 and 210, see column 12, lines 29-40) communicatively coupled to a layer-2 gateway device (RAN or Radio access network), the layer-2 gateway device and a user device (MH or mobile host) having established there between a communications session that supports a first quality of service level (default setting of QoS, column 10,

Art Unit: 2419

lines 5-15), a method for managing the communications session established between the layer-2 gateway device and the user device, the method comprising the computer-implemented steps of: receiving, a request forwarded by the layer-2 gateway device that originated from the user device (QoS change request from the mobile to RAN and then RAN forwards Policy request, which is related to QoS change request, to policy manager in Serving LSF, steps 1 and 2, column 24, lines 18-45); wherein the request (policy request) is a request for a particular application service (bandwidth desired for the current session) provided by the application server and not an express request to change the quality of service level supported by the communications session (column 9, lines 1-10 and column 10, lines 5-15: The examiner views an implicit request message as the opposite of an express request message.); determining based upon the request for the particular application service and policy criteria (a decision is based on subscriber user profile and networks available resources see column 16, lines 1-25), a second quality of service level (modified setting of the QoS) to be supported by the communications session; sending a message (policy decision) to the layer-2 gateway device that specifies a quality of service profile for the second quality of service level to be supported by the communications session (column 24, lines 45-55); wherein the step of sending a message causes the layer-2 gateway device to make a layer-2 change (enforces) in a communications link used for the communications session so that the communications session supports the second quality of service level instead of the first quality of service level (column 24, lines 50-59); and receiving an acknowledgement (accounting message) from the layer-2 gateway device that indicates

Art Unit: 2419

that a layer-2 change was made in a communications link used for the communications session (column 24, lines 60-65)

With regard to claims 3, 10, and 17, Amin teaches: wherein the step of sending a message to the layer-2 gateway device causes a modification of session context data (reallocation of required resources) maintained by the layer-2 gateway device and associated with the communications session (column 24, lines 50-59).

With regard to claims 4, 11 and 18, Amin discloses generating and sending to a layer-2 gateway an Authentication, Authorization, and Accounting Change of Authorization (CoA) Request command (authorization request) that specifies a quality of service profile for the second quality of service level (column 16, lines 25-36).

With regard to claims 5, 12, and 20, Amin teaches: wherein the first and second quality of service levels each specifies an amount of bandwidth to be allocated to the user device (see abstract, default setting has a default amount of bandwidth. since the application server can modify the default setting, then it can modify the default amount of bandwidth.).

With regard to claims 6, 13, and 21, Amin teaches: wherein the user device is a wireless device (mobile host, column 18, lines 35-45).

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Amin et al. in view of Ahvonen (US 7,209,458).

with regard to claim 19:

Amin et al. discloses all of the subject matter as described above except for wherein the apparatus further comprises means for specifying the quality of service profile for the second quality of service level using a vendor-specific attribute containing the 3<sup>rd</sup> Generation Partnership Project 3GPP- Negotiated-QoS attribute.

Ahvonen et al. teaches a policy control function (application server) that determines QoS level for a mobile device (column 7, lines 5-19) similar to Amin's system. However the Ahvonen teaches the PCF send decision to the gateway, and the gateway enforces the QoS level determined by PCF decision to modify (upgrade or downgrade) the QoS level of the PDP context (column 7, lines 20-30) in order to consistently and efficiently control QoS allocation in a radio network (column 10, lines 11-20). Also Ahvonen teaches that PDP context has a maximum allowable QoS that follow 3GPP specifications (column 1, lines 47-55 and column 8, lines 50-60).

Therefore it would have been further obvious to one having ordinary skill in the art at the time invention was made to have policy decision message specify the maximum allowable QoS level using the 3GPP specification as taught by Ahvonen et al. in the system of Amin in order to consistently and efficiently control QoS allocation in a 3G radio network.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARCUS R. SMITH whose telephone number is (571)270-1096. The examiner can normally be reached on Mon-Thurs: 7:30 am - 5:00 p.m. and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on 571 272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRS 6/10/09  
/Pankaj Kumar/  
Supervisory Patent Examiner, Art Unit 2419